

### **Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in this application.

### **Listing of Claims:**

1. (CURRENTLY AMENDED) A solid detergent composition comprising:
  - (a) an effective amount of a cleaning agent to provide soil removal, wherein the cleaning agent comprises at least one of:
    - (i) surfactant;
    - (ii) source of alkalinity;
    - (iii) water conditioning agent; ~~and~~ or
    - (iv) enzyme;
  - (b) an effective amount of a binding agent dispersed throughout the solid detergent composition to provide the detergent composition as a solid at room temperature within about 20 minutes of extrusion, the binding agent comprising a result of mixing:
    - (i) about 10 wt.% to about 80 wt.% alkali metal carbonate;
    - (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate; and
    - (iii) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;wherein the solid detergent composition is provided as an extruded ~~or cast~~ solid as a result of a step of hardening.
2. (ORIGINAL) A solid detergent composition according to claim 1, wherein the binding agent comprises alkali metal sesquicarbonate.
3. (ORIGINAL) A solid detergent composition according to claim 1, wherein at least a portion of said alkali metal bicarbonate is provided as a reaction product of alkali metal carbonate and acid.

4. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition further comprises a builder comprising sodium tripolyphosphate, sodium nitrilotriacetate, or mixtures thereof.
5. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition further comprises a builder comprising sodium tripolyphosphate, organic phosphate, amino carboxylate, or mixtures thereof.
6. (ORIGINAL) A solid detergent composition according to claim 1, wherein the cleaning agent comprises a surfactant comprising at least one of a nonionic surfactant, an anionic surfactant, and a mixture thereof.
7. (CANCELED)
8. (ORIGINAL) A solid detergent composition according to claim 1, wherein the cleaning agent comprises alkali metal carbonate monohydrate and anhydrous alkali metal carbonate.
9. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition comprises a blend of two or more organophosphonate compounds, a blend of two or more aminoacetate compounds, or a blend of at least one organophosphonate compound and at least one aminoacetate compound.
10. (ORIGINAL) A solid detergent composition according to claim 1, wherein the composition is in the form of a pellet.
11. (ORIGINAL) A solid detergent composition according to claim 1, wherein the solid composition is in the form of a block.
12. (CANCELED)

13. (ORIGINAL) A solid detergent composition according to claim 1, wherein the solid composition is in the form of a cast solid.

14. (CURRENTLY AMENDED) A method for solidifying a detergent composition, the method comprising:

(a) mixing an effective amount of a cleaning agent to provide soil removal and an effective amount of a binding agent to solidify the detergent composition to form a mixture, the cleaning agent comprising at least one of:

- (i) surfactant;
- (ii) source of alkalinity;
- (iii) water conditioning agent; ~~and~~ or
- (iv) enzyme;

the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate;
  - (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate; and
  - (iii) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;
- (b) ~~east~~~~ing~~ ~~or~~ extruding the mixture; and
- (c) hardening the mixture to form the solid detergent composition within about 20 minutes of extruding the mixture.

15. (ORIGINAL) A method according to claim 14, further comprising a step of:

- (a) generating alkali metal bicarbonate by reacting alkali metal carbonate with acid.

16. (ORIGINAL) A method according to claim 15, wherein the acid comprises at least one of citric acid, sulfamic acid, adipic acid, succinic acid, and mixtures thereof.

17. (ORIGINAL) A method according to claim 14, wherein the binding agent comprises alkali metal sesquicarbonate.

18-19. (CANCELED)

20. (ORIGINAL) A method according to claim 14, further comprising a step of:
- (a) packaging the mixture of cleaning agent and binding agent.
21. (ORIGINAL) A method according to claim 14, wherein the composition comprises a blend of two or more organophosphonate compounds, a blend of two or more aminoacetate compounds, or a blend of at least one organophosphonate compound and at least one aminoacetate compound.
22. (PREVIOUSLY PRESENTED) A method according to claim 14, wherein the step of casting or extruding the mixture comprises extruding the mixture into a pellet.
23. (PREVIOUSLY PRESENTED) A method according to claim 14, wherein the step of casting or extruding the mixture comprises extruding the mixture into a block.
- 24-25. (CANCELED)
26. (CURRENTLY AMENDED) A solid detergent composition comprising:
- (a) an effective amount of a cleaning agent to provide soil removal, wherein the cleaning agent comprises at least one of:
    - (i) surfactant;
    - (ii) source of alkalinity;
    - (iii) water conditioning agent; ~~and~~ or
    - (iv) enzyme;
  - (b) an effective amount of a binding agent dispersed throughout the solid detergent composition to provide the detergent composition as a solid at room temperature within about 20 minutes of extrusion, the binding agent comprising a result of mixing:
    - (i) about 10 wt.% to about 80 wt.% alkali metal carbonate;
    - (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate;
    - (iii) alkali metal sesquicarbonate; and

- (iv) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;

wherein the solid detergent composition is provided as an extruded ~~or cast~~ solid in the form of a block as a result of a step of hardening.

27. (CURRENTLY AMENDED) A method for solidifying a detergent composition, the method comprising:

(a) mixing an effective amount of a cleaning agent to provide soil removal and an effective amount of a binding agent to solidify the detergent composition, the cleaning agent comprising at least one of:

- (i) surfactant;
- (ii) source of alkalinity;
- (iii) water conditioning agent; ~~and~~ or
- (iv) enzyme;

the binding agent comprising a result of mixing:

- (i) about 10 wt.% to about 80 wt.% alkali metal carbonate;
- (ii) about 1 wt.% to about 40 wt.% alkali metal bicarbonate;
- (iii) alkali metal sesquicarbonate; and
- (iv) a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate;

(b) ~~casting or~~ extruding the mixture to form a block; and

(c) hardening the mixture to form the solid detergent composition within about 20 minutes of extruding the mixture.